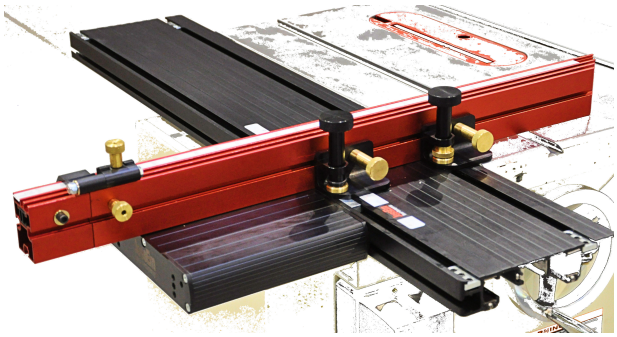
Mast R Slide 7500

Precision Sliding Cross-Cut Table

User Manual

Model #07500



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Thank you for choosing this product from JessEm Tool Company. We appreciate your support and hope that our product serves you well. This product is designed to provide many years of reliable service provided it is used as intended and taken care of.

This user manual will assist you in assembly and general operation of this product. It is not our intent to teach you about woodworking. It is assumed that you are an experienced woodworker with the basic skills and experience necessary to use this product safely. If you are unsure or uncomfortable about safely using this product after reading the following instructions we urge you to seek additional information through widely available woodworking books or classes.

As part of our Continuous Product Improvement Policy, JessEm products are always advancing in design and function. Therefore there may be differences between what is shown in our catalogs, website or at retail display and what is sold at time of purchase. We reserve the right to make positive changes to our products at our discretion without notification.

IMPORTANT!
Read and understand the contents of this manual before assembly or operation of this product.

IMPORTANT!
Make sure that no part of the miter fence can make contact with the blade or cutter and all knobs are securely tightened before each use.

IMPORTANT!
ALTERING THE TABLE SAW FENCE RAILS

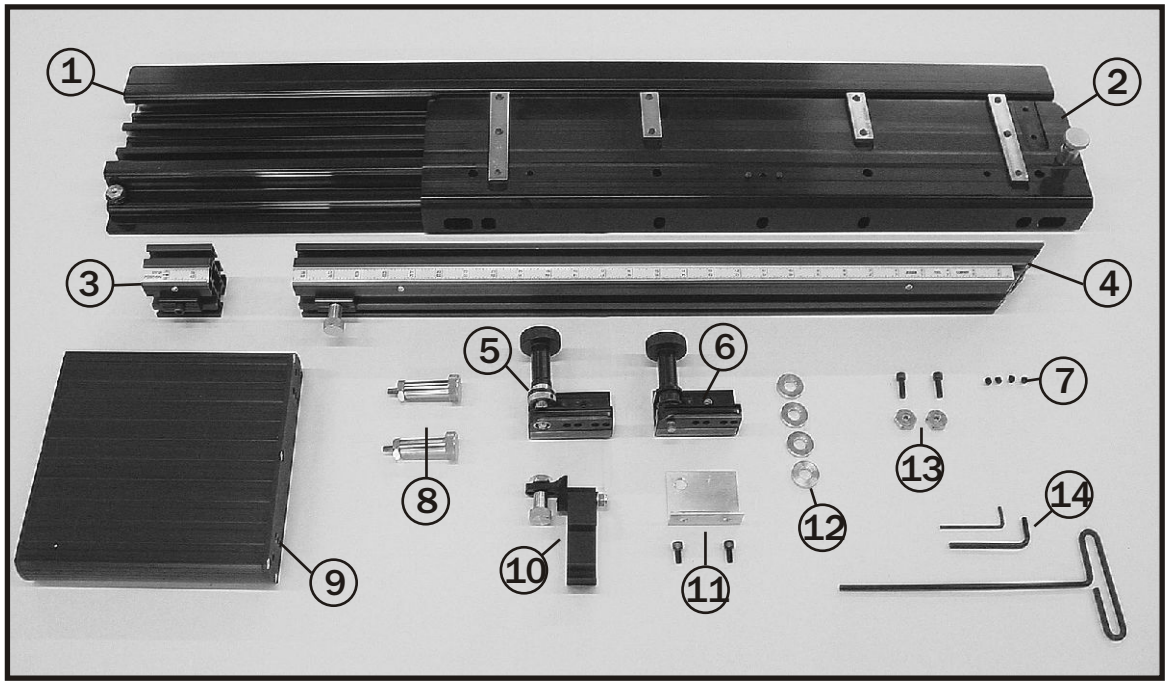
The JessEm Mast-R-Slide 7500 is designed to replace the left wing on a cast iron table saw. **NOTE: This sliding table accessory requires the front and rear fence rails to be altered to allow for the back and forth sliding motion of the sliding table.**

The installation of the Mast-R-Slide 7500 requires that the front and rear rails for the rip fence on all saws be either relocated (moved to the right) or cut off (shortened) so that no part of the front and rear fence mounting rails extend beyond the left edge of the table where the left extension wing would mount.

IMPORTANT SAFETY PRECAUTIONS

Before operating any machinery, power tool or accessory read and understand all safety instructions in the owner's manual for the tool, machine or accessory in use.

- If you do not have a manual, contact the manufacturer and obtain one before using any power tool or accessory or equipment.
- Always wear proper eye protection that is in compliance with ANSI safety standards when operating any power tool or machinery.
- Always use proper guards and safety devices when operating power tools and machinery.
- Carefully check accessories or other equipment before each use. Do not use if damage or defect is suspected.
- Do not wear loose clothing or jewelry that may catch on tools, machinery, accessories or other equipment.
- Always make sure the fence, gauge and all adjustable knobs are locked firmly into a tight position before each use.
- Before making any cut, always be sure the miter gauge fence or any other part of this accessory or other accessories used with this product offer a safe clearance and will not make contact with the saw blade or any other cutting source.
- Do not sit on, lean on or place heavy objects on top of the sliding table. Be careful not to over load the sliding table with large or heavy materials to the point of possibly tipping over the table saw. This safety precaution is especially important when the sliding table is at full extension.



PARTS AND COMPONENTS LIST

1. SLIDING TABLE (TOP)
2. UNDER CARRIAGE ASSEMBLY
3. FENCE EXTENSION BLOCK
4. MITER FENCE
5. FENCE PIVOT BRACKET
6. FENCE CLAMPING BRACKET
7. SET SCREWS TO LEVEL EXTENSION WING (4)
8. FENCE ADJUSTMENT KNOBS (2)
9. EXTENSION WING
10. FLIP STOP
11. SAW POWER SWITCH MOUNTING BRACKET
12. LARGE 1" DIAMETER X 3/16" WASHERS (4)
13. EXTENSION WING MOUNTING HARDWARE
14. HEX WRENCHES: 3/32, 1/8", 5/32, 3/16", AND 3/16" T-HANDLE.

PREPARING THE TABLE SAW FOR INSTALLATION OF THE MITE-R-SLIDE 7500

1. Remove the left extension wing from your table saw. Most extension wings are held in place with either three or four bolts that can be accessed from underneath the extension wing.

2. Once your extension wing is removed the front and rear rails for guiding the saw's rip fence need to be repositioned to the right or cut off where the left extension wing would mount. The sliding table requires no protrusions beyond the left edge of the saw table after the extension wing is removed. To prepare to cut the fence rails mark the rails at the edge of the saw with a felt tip marker. The fence rails then need to be removed from the saw to be cut. If you have access to a band saw you can cut the rails on the line previously drawn or they can be taken to a local machine shop to be cut on this line. Another option is to cut the rails with a hack saw and file the edges afterward. Another option is to re-position the fence rails further to the right.
Note: Repositioning the front fence rail will require you to replace the scale used for the rip fence.

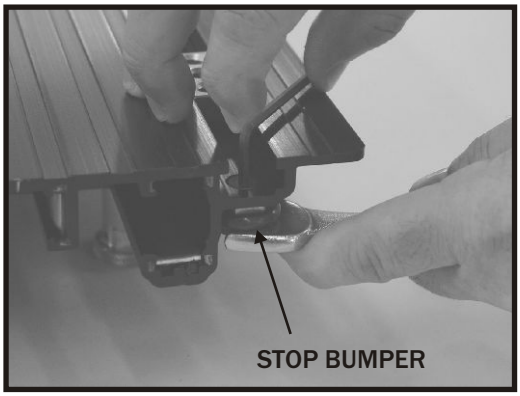


FIG. 1

MOUNTING THE MAST-R-SLIDE

1. Carefully remove the sliding table and undercarriage assembly (items 1 and 2 on the parts list on page 2) from the carton as the two components are assembled but can still slide on the bearings.

2. You must first remove the sliding table from the undercarriage assembly. There is (1) stop bumper on each end of the table slide. Remove the stop bumper from the end that the angle scale label is applied. Look for the brass fitting with the rubber "O-Ring" bumper.

3. To remove the stop bushing use the 1/8" hex wrench and a 5/8" open end wrench (Fig. 1).

4. Carefully slide the table slide off the undercarriage assembly and set aside.

ATTACHING THE UNDERCARRIAGE

2. The undercarriage assembly mounts to the left side of the table saw replacing the left extension wing. Most American style table saws consist of a (3) bolt mounting pattern. Some saws use a (4) bolt mounting pattern. Check to see which hole pattern is used for mounting the left extension wing on your saw. Determine if the universal hole pattern on the Mast-R-Slide will work with your table saw's hole pattern. The Mast-R-Slide hole pattern is designed to accommodate the most popular brands of American style table saws, such as a Delta Unisaw, Jet Exacta Saw and others with similar hole patterns such as General, Shop Fox, Grizzly, etc. Most Sears saws utilize a (4) hole mounting pattern. If the table saw you are mounting the Mast-R-Slide to is not mentioned above or is an older style table saw you may need to drill the proper holes to mount the Mast-R-Slide or contact JessEm Tool Company for assistance.

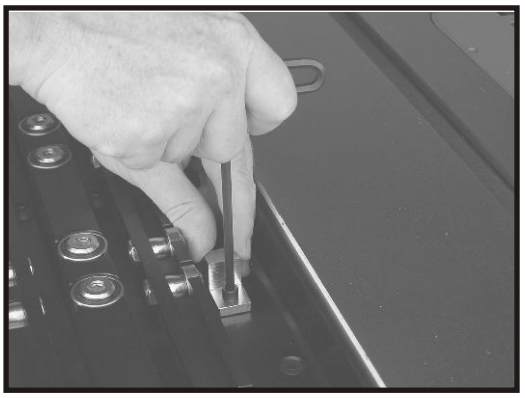


FIG. 2

REMOVE THE STOP BLOCK FROM THE UNDERCARRIAGE ASSEMBLY.

1. With a (3) bolt mounting pattern, the "T" shaped stop block needs to be removed temporarily to access the center bolt hole

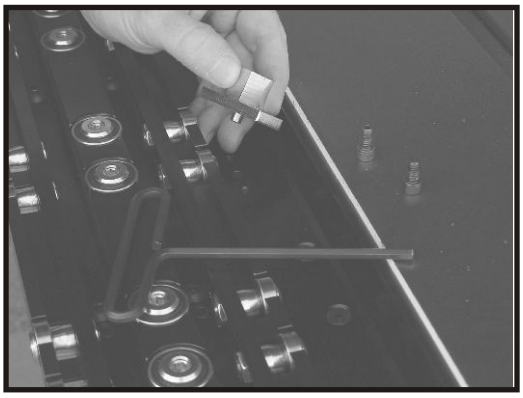


FIG. 3

before mounting the undercarriage to the table saw (if you are working with a (4) bolt mounting pattern you can leave the stop block in place and skip this step). Using the 3/16" T-handle hex wrench provided, remove the two socket head cap screws and remove the stop block from the undercarriage assembly (Figs. 2 & 3). Note: the stop block is located with a 1/4" dowel on the bottom side and may require additional effort to pull the stop block off after the cap screws are removed.

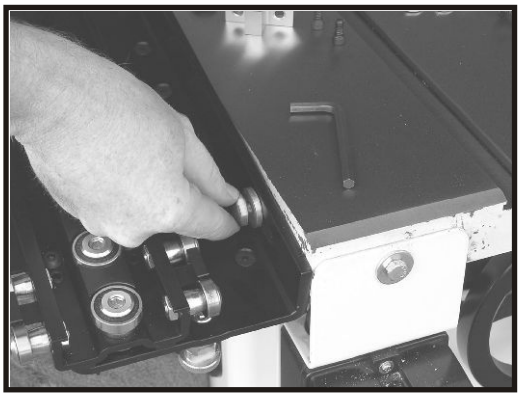


FIG. 4

ATTACHING THE UNDERCARRIAGE

(THREE HOLE MOUNTING PATTERN)

Use the same mounting bolts from the extension wing on your table saw to attach the undercarriage to the table saw top.

1. Each mounting bolt receives one of the heavy 1" diameter x 3/16" thick mounting washers to be positioned under the bolt head and in front of the mounting bracket.

While securely supporting the weight of the undercarriage in one arm, begin by threading one of the mounting bolts with the 1" heavy washer, through one of the end holes on the undercarriage and into the tapped hole on the table saw (Fig. 4) do not tighten completely at this time.

2. Now that one end of the undercarriage is supported by one mounting bolt, line up the opposite end of the undercarriage with the outside mounting hole on the saw and thread a second mounting bolt with 1" heavy washer, into the tapped hole on the opposite side of the table saw (Fig. 5) do not tighten completely at this time.

FIG. 5

3. Now thread the center bolt with 1" heavy washer, into the remaining hole in the table saw top (do not tighten completely at this time).

(FOUR HOLE MOUNTING PATTERN)

If your saw has a four bolt mounting pattern each bolt receives one of the heavy 1" diameter X 3/16" thick washers.

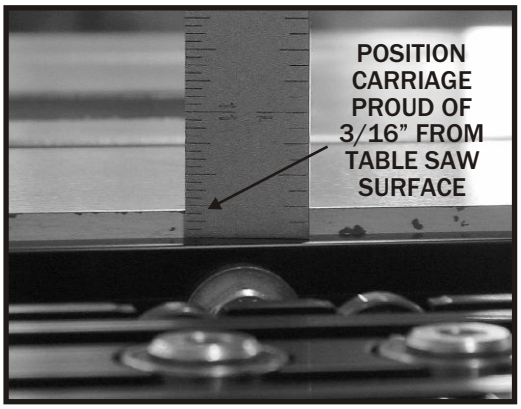


FIG. 6

4. Align the top edge of the mounting bracket slightly more than 3/16" below the top surface of the table saw, along the length of the mounting bracket and tighten all mounting bolts securely.

5. Re-install the "T"-shaped stop block that was removed in Figs 2 & 3.

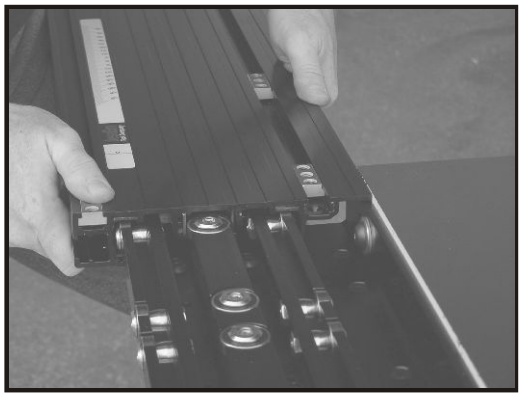


FIG. 7

RE-ATTACHING THE TABLE SLIDE

1. Now take the table slide and starting from the rear end of the saw, align the tracks on the table slide with the bearings on the lower carriage assembly and carefully slide the table onto the carriage assembly (Fig. 7).

2. Continue sliding toward the front of the saw until the front end overhangs the undercarriage by about four inches.

3. Re-assemble the stop bumper from Fig. 1.

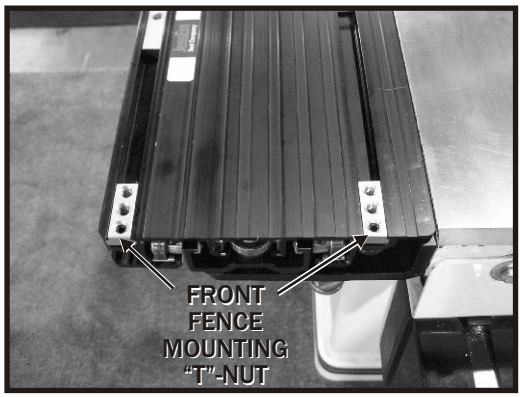


FIG. 8

RE-POSITION THE FENCE MOUNTING "T"-NUT

Note: The fence mounting "T"-nut (on the right side) was moved temporarily prior to shipment to allow access to the stop bumper during assembly.

2. Now reposition the fence mounting "T"-nut so that it is flush with the front edge of the table slide (Fig. 8). The "T"-nut on the right side should be positioned so that it is even with the "T"-nut on the left side. Using the 5/32" hex wrench, loosen the set screw to slide the "T"-nut into position. Then re-tighten the set screw to secure the "T"-nut into position flush with the front edge of the table slide.

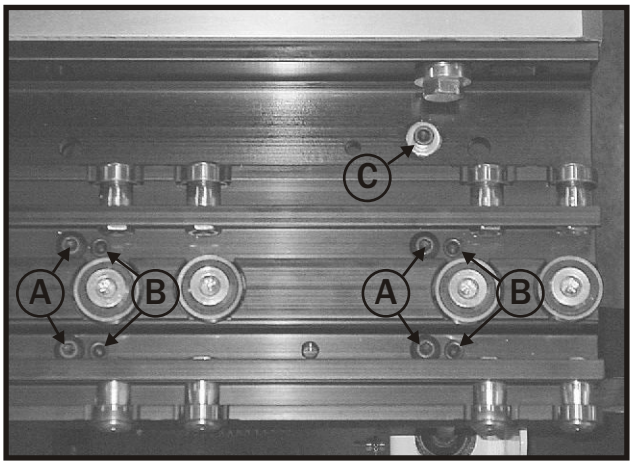


FIG. 9

ADJUSTING THE TABLE SLIDE

1. The lower carriage assembly has a series of button head cap screws (A) and set screws (B) that are used to level the table slide to the surface of the cast iron table saw top. You can level the table by loosening the button head cap screws and then using the set screws to jack the table up or down as needed. Adjustments can be made for side to side and end to end leveling with this method. It is best to work from one end of the table slide to the other. The socket head cap screw (C) is used to adjust the table slide parallel to the table saw.

FIG. 10

ADJUSTING THE TABLE SLIDE PARALLEL

1. To adjust the table slide parallel to the table saw, loosen the socket head cap screws (letter "C" in Fig. 9) at both ends of the undercarriage. Loosen the four button head cap screws two revolutions (letter "A" in Fig. 9) on the right side of the lower carriage assembly. Then slide the table slide to the right end of the undercarriage and loosen the button head cap screws on the left side of the carriage assembly two revolutions each.

2. On the left end of the table slide, lay a straight edge along the edge of the table saw so it rests standing up on the lower carriage assembly, between the table slide and the edge of the table saw top (Fig.10).

3. Push the table slide against the straight edge and snug up the socket head cap screw (C) from Fig. 9.

4. Then reposition the straight edge at opposite end of the table slide and repeat step 3 on the front end of the saw. Leave the button head cap screws loose for leveling in the next step.

Provided your saw blade is aligned parallel with your saw's miter slot this should provide a parallel cutting operation. If after all adjustments have been made and you are not happy with the cut quality you may investigate this alignment in greater detail later on if necessary.

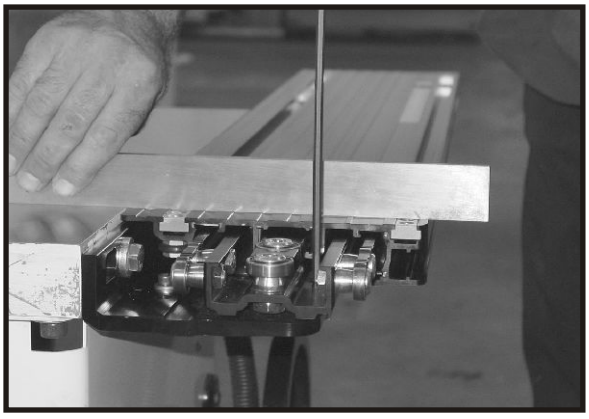


FIG. 11

LEVELING THE TABLE SLIDE

Note: The (8) button head cap screws (letter "A" in Fig. 9) should all be loosened about two revolutions for the following adjustment.

1. Begin with a rough adjustment at each end of the table slide. Position the table slide so just the outer (2) button head cap screws and (2) outer set screws are accessible at the rear end of the saw. Lay a straight edge across the table saw surface so that the straight edge rests on the table saw top and crosses over onto the table slide (Fig. 11). Site down along the lower edge of the straight edge and determine the adjustment necessary to level the two surfaces.

2. Adjust the two outer set screws in (clockwise) to raise the table slide or out (counterclockwise) to lower the table slide. To adjust the inside edge adjust the inside set screw, to adjust the outside edge adjust the outer set screw. Once the rear end of the table slide is level, lightly snug the two button head cap screws.

3. Do the same adjustment to the opposite end of the table slide.

4. Recheck both ends again and readjust if necessary.

MAKING FINE ADJUSTMENTS FOR LEVEL

5. After making the initial rough adjustments to both ends, if additional adjustments are necesssary, make fine adjustments as follows. To raise the table slide, loosen the button head cap screw 1/8 of a turn and tighten the set screw until it bottoms out. Repeat if necessary in small increments. To lower the table slide, loosen the set screw 1/8 of a turn and tighten the button head cap screw.

6. Once the ends of the table slide are level to your satisfaction go to the inner pairs of button head and set screws and check for level at these locations. Adjust the set screws up or down as necessary and snug up the button head cap screws. Make fine adjustments at both ends as done in step 5 if necessary.

7. Recheck and readjust as necessary to achieve your desired position of level.

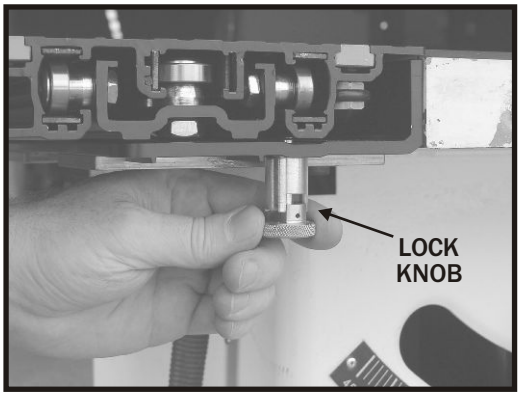


FIG. 12

LOCKING THE TABLE SLIDE POSITION

1. The table slide has a spring loaded, shot pin type, locking knob under the front end of the lower carriage assembly (Fig. 12).

2. Pull down and twist the knurled knob until the “T” knob slides into the groove on the shaft to engage the shot pin. To release the shot pin, pull and twist the knurled knob so that the “T” knob sits on the shaft perpendicular to the groove and disengages the shot pin.

3. There are four stops for locking the table slide in a fixed position. You can position the table slide to be flush with the rear of the lower carriage assembly, or flush with the front of the carriage assembly, or centered on the carriage assembly, or positioned with the table slide at full extension to the front of the saw for safely holding the table slide in a fixed position while placing the workpiece onto the table slide in preparation for cutting.

WARNING! - Do not sit on, or lean on the sliding table at any time and especially not when the table slide is at full extension. Do not overload the sliding table with heavy objects or a heavy workpiece at any time as you may risk causing the table saw to tip over and cause damage to the machine and/or injury to the operator.

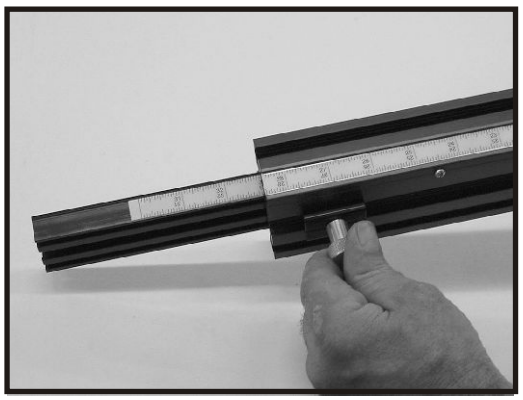


FIG. 13

ASSEMBLING THE FENCE

1. Take the miter fence (item #4 from the parts list on page 2) and observe that inside the fence extrusion is the extension rod. Hold the fence level and being careful not to let the extension rod slide out and fall on the floor, loosen the extension locking knob and slide the extension rod out (Fig. 13) to allow the attaching of the fence extension block.

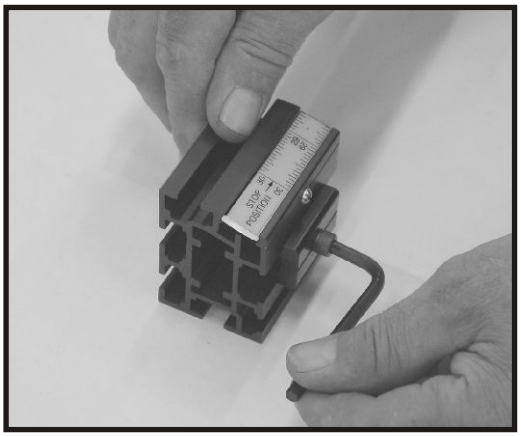


FIG. 14

2. Take the fence extension block (item #3 from the parts list on page 2) and using the 3/16” hex wrench, loosen the 1/4”-20 cap screw on the extension block to loosen the internal nut sufficiently to allow insertion onto the fence extension rod (Fig. 14).

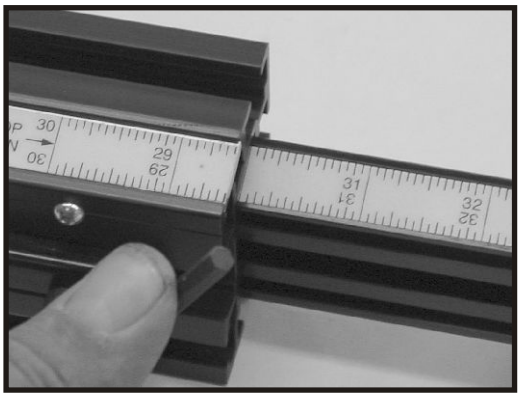


FIG. 15

3. Slide the fence extension rod into the extension block ensuring the internal nut is aligned with the T-slot on the extension rod. Position the extension block so the inner edge of the extension block lines up with the “red” line at the 30 inch mark on the scale (Fig. 15). Re-tighten the cap screw on the extension block clamping nut to hold it in this position.

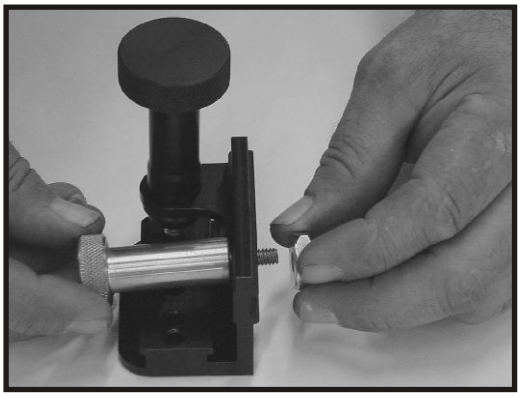


FIG. 16

ATTACH THE FENCE MOUNTING BLOCKS

1. Take the two brass knobs and the two fence mounting brackets (items #5, #6 and #8 from the parts list on page 2). Remove the hex nut from each brass knob and attach each brass knob to each fence mounting bracket by inserting the bolt through the mounting bracket and threading the nut part way on (Fig. 16) to allow the nut to slide into the track on the miter fence.

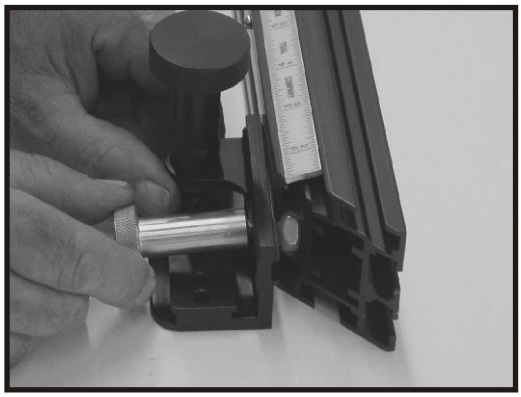


FIG. 17

2. Fence pivot bracket #5 has a brass knurled section on the lower portion of the knob. Fence clamping bracket #6 does not. Attach fence clamping bracket #6 to the miter fence first by sliding the hex nut into the center T-slot on the back of the miter fence (Fig. 17). Then attach fence pivot bracket #5 with the brass knurled section, in the same manner.

The fence is now assembled and ready to mount on the table slide.

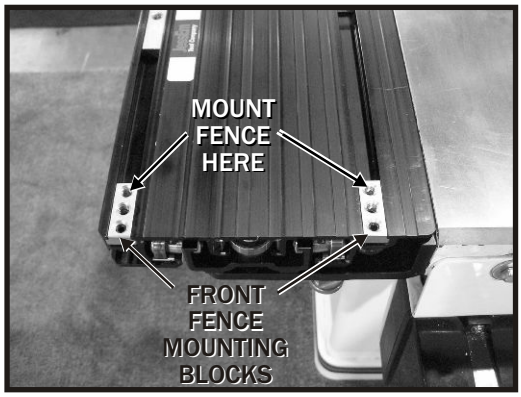


FIG. 18

ATTACHING THE FENCE TO THE TABLE SLIDE

1. The table slide has three sets of fence mounting "T"-nuts to attach the fence in one of three different positions. All but one of the "T"-nuts has three tapped holes.

The other longer "T"-nut has one tapped hole and two through holes, and is designed to slide with the fence in the mitering position (Fig. 19). Two of the tapped holes contain set screws for locking the "T"-nut in a fixed position. The third tapped hole is where the fence mounting brackets are screwed into. See figures 18, 19, & 20 for the fence mounting bracket locations for each of the three fence positions.

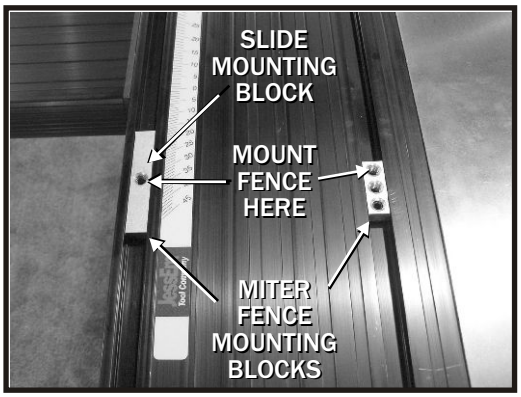


FIG. 19

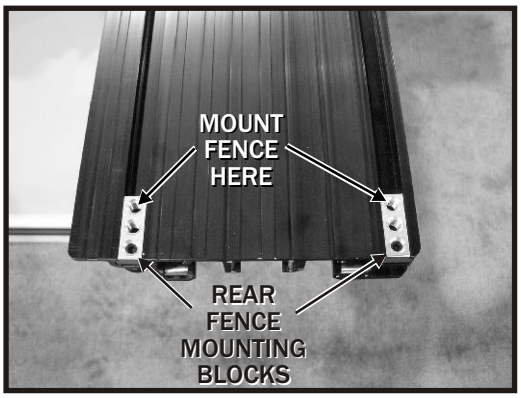


FIG. 20

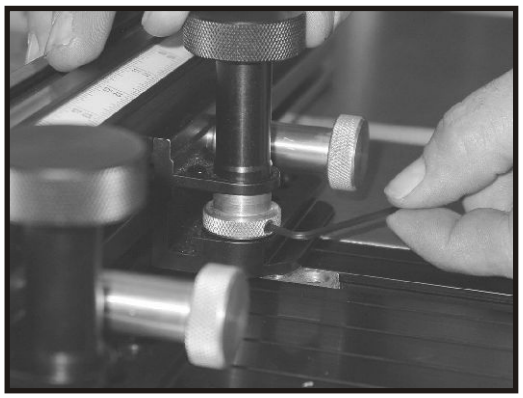


FIG. 21

ADJUSTING THE PIVOT KNOB

1. The pivot knob has a brass section on the shaft which can be adjusted to remove up and down play. Loosen the set screw with the 3/32" hex wrench and the knurled brass section can be tightened or loosened as necessary (Fig. 21). Re-tighten the set screw after making the desired adjustment.

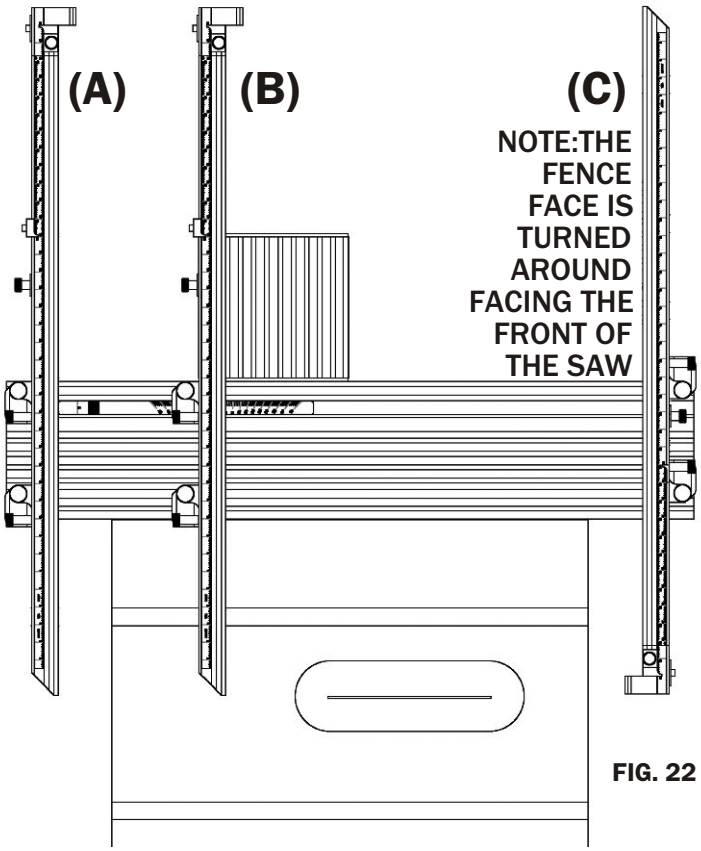


FIG. 22

THREE DIFFERENT FENCE POSITIONS FOR MITERING AND 90 DEGREE CROSS-CUTS

1. The miter fence can be positioned in one of three different locations on top of the sliding table assembly (Fig. 22). Fence position (A) is mounted furthest in the front position on the sliding table. This is intended to be a fixed 90 degree to the blade position for making right angle cuts only. Fence position (B) is an inner front position and is the optimal position for mitering work using the miter fence at various angles up to 45 degrees in both directions. Fence position (C) is a rear position and the fence is to be rotated so the fence face points toward the front of the table saw. This is also intended to be used in a fixed 90 degree to the blade position for making right angle cuts only. This rear end position offers the maximum cross cut capacity when pushing the material through the blade with the workpiece positioned square against the fence face to achieve a greater cross cut capacity. This will not necessarily result in a cut that is carried all the way through the blade (depending on the configuration of your table saw).

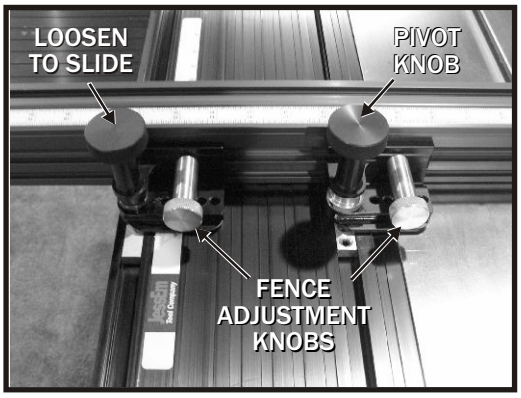


FIG. 23

OPERATION OF THE MITER FENCE

1. There are four knobs used to make adjustments to the fence position (Fig. 23). The two brass fence adjustment knobs are used to adjust the fence from side to side as to position the fence to the right, just short of the saw blade. Loosen the two brass knobs and slide the fence left or right. The two larger black knobs are used to lock the fence in a fixed position at 90 degrees or at various other angles. When using the fence in the miter position the right black knob is designed to pivot, while the left black knob is loosened to allow a sliding action at various angles. You must also loosen the left brass fence adjustment knob while rotating the fence at various angles. Be sure to tighten all knobs securely once you have achieved your desired fence position and before making any cut with the table saw blade.

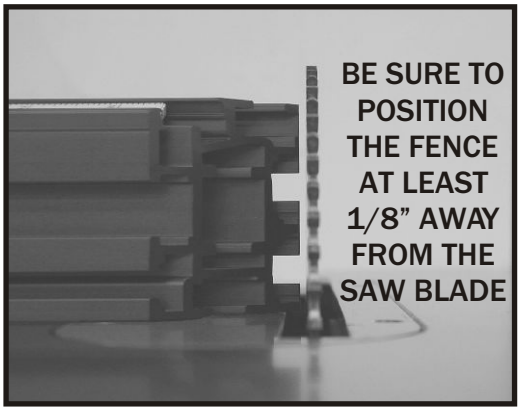


FIG. 24

ADJUST THE FENCE TO THE BLADE

1. Loosen the fence adjustment knobs and position the blade at least 1/8” from the saw blade (Fig. 24). Note: Measured cuts using the flip stop with the fence scale are meant to be performed at 90 degrees. The scale can not be reset for measured cuts at other angles. It is only for 90 degree cuts.

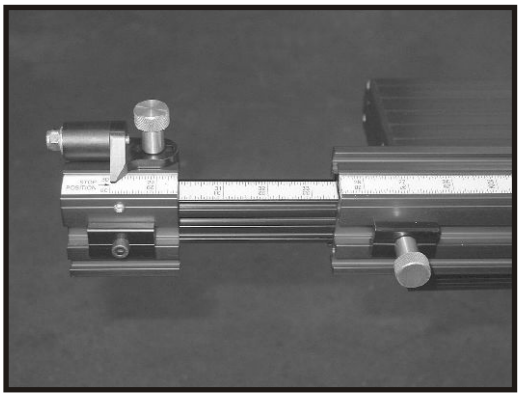


FIG. 25

ATTACH THE FLIP STOP

1. The flip stop slides in the “T”-track that runs along the top front of the miter fence and fence extension. With the pointer lined up with the “STOP POSITION” mark on the scale you can read measured cuts on the fence extension rod (Fig. 25).

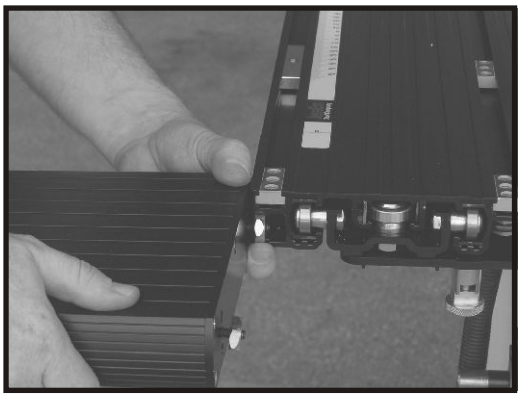


FIG. 26

ATTACHING THE EXTENSION WING

1. Attach the large hex nuts with cap screws (item #13 from the parts list on page 2) to the extension wing.

2. Loosen the large hex nuts to allow enough space for them to slide into the groove that runs along the side of the table slide (Fig. 26).

3. Slide the extension wing along the groove and position it at your desired location. Tighten the cap screws so that the extension wing is securely fastened to the table slide. You can adjust the position of the extension wing to locate anywhere along the side of the table slide depending on the cutting operation being performed. Locate the extension wing in the optimal position wherever additional support of the workpiece is needed.

Additional extension wings are sold separately if you wish to add another to your system. Ask your JessEm dealer for item #07511.

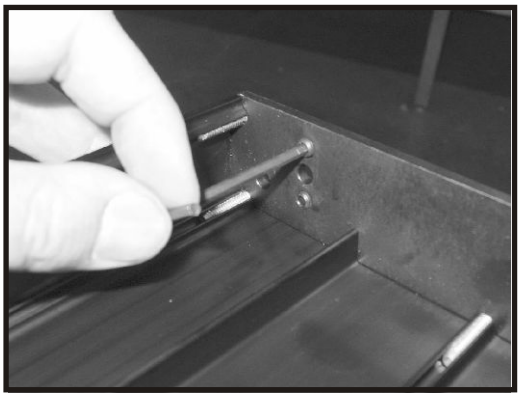


FIG. 27

LEVELING THE EXTENSION WING

1. There are two set screws located above and below the mounting holes for the extension wing (Fig. 27). If the extension wing is not level with the table slide you can adjust for level by first loosening the mounting screws slightly. Then tighten the upper set screw to lower the outside edge. Or, tighten the lower set screw to raise the outside edge. Re-tighten the socket head cap screws after making adjustments for level.

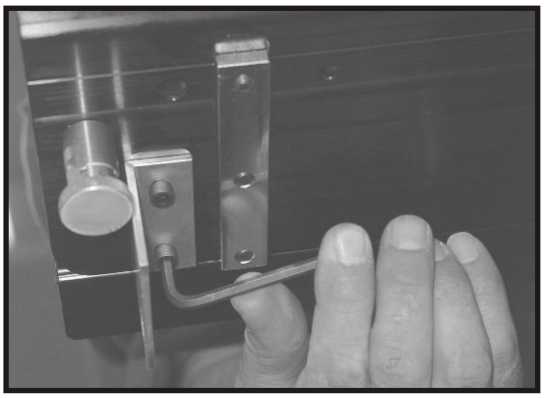


FIG. 28

ATTACHING THE POWER SWITCH

1. If your saws power switch was attached to the left extension wing you may be able to attach it in a similar manner under the front edge of the saws table top. Or you may use the bracket (item #5 from the parts list on page 2) and mounting screws provided to attach the power switch to the bottom of the undercarriage for the Mast-R-Slide. There are two tapped holes adjacent to the shot pin locking knob under the front edge of the undercarriage to mount the bracket on (Fig.28). Use the hardware from your switch to attach the switch box to the bracket.

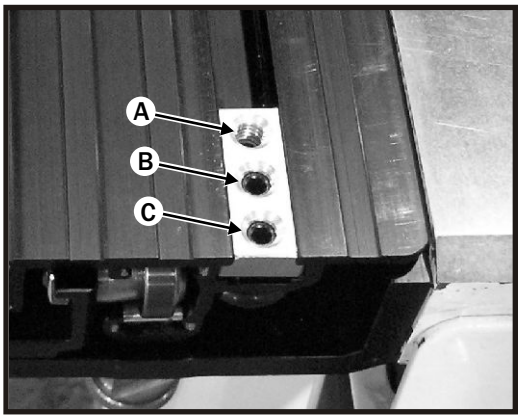


FIG. 29

FIG. 30

ADJUSTING THE FENCE SQUARE TO BLADE

1. Each of the three fence positions are factory set for 90 degrees with the inside edge of the table slide. After installing the Mast-R-Slide, check to see if each of the three fence positions are at 90 degrees to the blade on your saw. If not you will need to re-adjust the fence to a 90 degree angle.

2. Begin by unscrewing both fence locking knobs and removing the fence from the fence mounting "T"-nuts (hole "A" Fig. 29). Using the 5/32" hex key, loosen the set screw at hole "B" so that it is free from contact with the track but does not protrude above the surface of the hole.

3. Re-attach the fence by screwing the fence locking knobs back into holes "A" (Fig. 29).

4. Loosen the set screw in hole "C" while being careful not to allow the fence to move from it's current location.

5. Place a square between the face of the fence and the saw blade and align the two faces at 90 degrees to each other and tighten the set screw (Fig. 30). Follow the same steps for the two fixed 90 degree positions at each end of the table slide. Then follow the same steps and align the fence face and saw blade to 90 degrees and also line the fence face up with the "zero" on the angle scale. Then tighten the set screw as shown in (Fig. 30). Recheck the three positions for squareness and repeat steps 1 thru 5 until each position is set square with the saw blade.

6. Unscrew both fence locking knobs and re-tighten the hidden set screw in the fence mounting "T"-nut from step 2.

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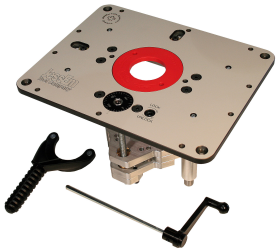

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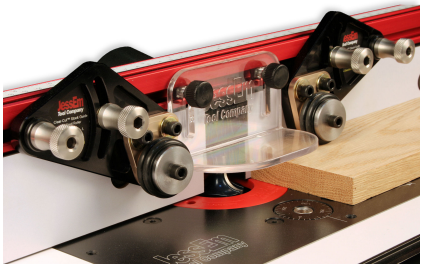

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